Field Border (feet)

Definition

A strip of perennial vegetation established at the edge of a field by planting or by converting it from trees to herbaceous vegetation or shrubs.

Purpose

To control erosion, protect edges of fields that are used as "turnrows" or travel lanes for farm machinery, reduce competition from adjacent woodland, provide wildlife food and cover, or improve the landscape.

Conditions where practice applies

At field edges, especially edges of crop fields.

Planning considerations

Water Quantity

1. Effects on the water budget, especially on volume and rates of runoff.

Water Quality

1. Filtering effects of vegetation on movement of sediment, dissolved and sediment-attached substances.

2. Effects on erosion and the transport of sediment, pathogens, and soluble and sediment-attached substances carried by runoff.

Specifications guide

Width of border and methods of establishing and maintaining vegetation.

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U.S. DEPARTMENT OF AGRICULTURE
Soil Conservation Service

Technical Guide
Section IV
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FIELD BORDER (Feet)

Specifications Guide

A. Determine the need and opportunities for establishment of field borders for alternative uses.

1. **Turnrows** - At established field edges such as field ditches, woods borders, etc. A minimum width of 10 feet is required; but this should be adjusted upwards for specific sites and/or specific equipment.

2. **Row Drainage** - Vegetated field borders provide stabilized outlet for row water. Shaping may be necessary. Width should be specified to meet needs.

3. **Erosion control** on sloping land, bare borders and low sloped banks at edge of fields not requiring critical area treatment. Determine width for local conditions.

4. **Travel lanes** for equipment where traffic does not require a constructed roadway. Design width for site and use.

5. **Wildlife Plantings** - For food and/or cover are beneficial at field edges; important along drainage systems or other established field delineations, in large fields primarily as cover to and from feeding areas.

6. **Natural Beauty** - Is enhanced with field borders vegetated with perennial grasses, legumes or shrubs.

7. Many borders should provide for a combination of uses. To accomplish this multiple use objective, careful planning for specific sites is essential.

B. Plan site preparation, shaping or excavation as necessary to insure proper functioning for the use(s) planned.

1. Where water movement is a problem, design should provide for the necessary row drainage and provide the capacity to transport water to the desired outlet. In these instances, depth and width of excavation necessary is determined by crops, slope of land, volume of field water, type of vegetation used, and type of equipment used. Designed grassed waterways may be used in lieu of field borders in certain locations to serve the dual purpose of field borders and grassed waterways.

2. Any soil excavated from the field border may be used to advantage in connection with land smoothing.

C. Determine the plants adapted to the site and use planned for the border.

1. Hay - Adapted perennial hay plants may be used at cultivated field edges on steep slopes or irregular topography.

2. Turnrows - All plants listed in Section E except shrub lespedeza, autumn olive, and bush honeysuckle are suitable for turnrows or field access.

3. Wildlife Plantings - All plants listed under Section E have some benefit to wildlife. Individual plants provide food and/or cover and final selection should be based on specific habitat requirements.

4. Erosion Control - Any of the plants in Section E except autumn olive and bush honeysuckle will give good erosion control and field borders. The exact width of the border and plants to be used should be determined for local site and soil conditions.

5. Land Preparation - Will vary according to site conditions and plants to be grown. Lime and fertilize adequately. See Item E for seeding rates. All sites with slope range greater than 3 percent should be mulched.

D. Maintenance

1. Shrub Lespedeza: Protect from fire and grazing. If bicolor is used, cut back every third year just before spring growth begins. If L. Japonica (VA-70) is used, this cutback will not be necessary. Fertilize with 400-800 pounds of 0-14-14 or similar ratio as necessary to maintain seed production.

2. Sericea Lespedeza: Fertilize with 400-800 pounds of 0-14-14 or similar ratio as necessary to maintain good growth. If mowing is necessary, do not mow closer than 4 inches.

3. Ladino Clover: Mow in late spring to control weeds and grass. An annual application of 400-600 pounds per acre of 0-14-14 or 0-9-27 (on soils low in potash) should be made in late winter.

4. Tall fescue and Orchardgrass: Mow to control weeds and topdress annually or every other year with 400-800 pounds of 8-8-8 or 5-10-10 per acre.

5. Bahia, Hybrid, and Common Bermuda: Apply 400-800 pounds of 8-8-8 or 5-10-10 per acre annually in early spring. Apply lime according to soil test recommendations every four to six years. If additional growth is desired, apply 50-100 pounds of nitrogen as a topdressing.

6. Autumn Olive, Bush Honeysuckle: Protect from fire and grazing. Fertilize as necessary to maintain healthy plants.

7. Switchgrass: May need two or more growth seasons to develop adequate stands. Makes excellent hay; coordinate harvest with nesting season. Apply 40-60 units per acre every other year. After well established, late winter burning every third year is helpful.

E. Establishing Vegetation--Seeding Rates, Dates

PLANTS	RATES PER ACRE	DATES OF PLANTING STATE RANGE	THIS F/O[1]	FERTILIZER	REMARKS
Pensacola Bahia[2]	20-25 lbs.	March 15-June 1		1-1 1/2 T. lime 4-600 lbs. 8-8-8 or 10-10-10	Cover seed 1/2" to 3/4" deep. Firm soil.
Wilmington Bahia[3]	20-25 lbs.	March 15-June 1		" "	" "
Tall Fescue and Orchardgrass	15-25 lbs.	Aug. 1-Oct. 15 Feb. 1-April 15		6-800 lbs. 8-8-8 or 10-10-10	Reduce rate in mixture.
Common Bermuda	Unhulled 8-10 lbs.	Jan. 1-April 1		1-1 1/2 T. lime 6-800 lbs. 5-10-10 or 10-10-10	Cover lightly; firm the soil.
	Hulled 6-8 lbs.	March 15-June 15		" "	" " Sprigs may be used.
Hybrid Bermuda	10-15 bu. in rows, 40-60 bu. broadcast	Feb.-April		1-1 1/2 T. lime, 4-600 lbs. 0-14-14 or 0-10-20	
Ladino Clover	4-6 lbs.	Aug. 1-Oct. 15 Feb. 1-April 15		2 T. lime, 8,1000 lbs. 2-12-12	
Sericea Lespedeza[4]	Scarified 25-35 lbs.	Mar. 1-June 1		1 T. lime, 4-800 lbs. 0-14-14.	Mulch if eroded site.
	Unscarified 40-60 lbs.	Nov. 1-Mar. 15		" "	" "
Shrub Lespedeza	Seed: 15-20 lbs.	Mar. 1-June 1		1 T. lime, 4-800 lbs. 0-14-14 or 0-10-20	Plant 1/2" deep.
	Plants: 4-6,000	Dormant season		" "	18-24" apart in 36-42" rows. Minimum of 5 rows. Do not plant on wet sites.
Autumn Olive	2 Rows: 4' spacing and 6' wide	February-March		Light Fertilization (one handful/plant) one year after planting date.	Suitable for wildlife and landscape improvement.
Switchgrass	6-8 lbs.	March 15-June 15		Except on critical areas, no fertilizer needed. Use 1 T. lime if pH is below 5.8	Cover seed 3/4" deep.

Rates, Dates (continued)

PLANTS	RATES PER ACRE	DATES OF PLANTING STATE RANGE	DATES OF PLANTING THIS F/O[1]	FERTILIZER	REMARKS
Bush Honeysuckle	2 Rows: 5' apart in rows	February-March		Light fertilization (one handful/plant) one year after planting date.	Suitable for wildlife and landscape improvement.
Tick Clover	10 lbs./acre	Mar. 15-Apr. 30		1 T. lime; 4-800 lbs. 0-14-14 or 0-10-20	Wildlife border and turnrows.
Lovegrass and Sericea	1 lb. Lovegrass with 30 lbs. of Sericea.	April and May		Same as for Sericea	Ideal cover for wildlife.

[1] Complete for each field office. Line out plants not adapted. Insert normal planting dates.
[2] Adapted south of a line from Rockingham to Washington, North Carolina.
[3] Adapted south and east of I-85.
[4] Unscarified sericea should be used in fall and winter.

Note: Other adapted perennials may be used for this type seeding. (See Critical Area Planting.)